



INDIANA DEPARTMENT OF TRANSPORTATION

STANDARDS COMMITTEE MEETING

Driving Indiana's Economic Growth

April 7, 2008

MEMORANDUM

TO: Standards Committee

FROM: Mike Milligan, Secretary

RE: Minutes for the March 20, 2008 Standards Committee Meeting

The Standards Committee meeting was called to order by the Chairman at 9:00 a.m. on March 20, 2008 in the N755 Bay Window Conference Room. The meeting was adjourned at 12:30 p.m.

The following members were in attendance:

Mark Miller, Chairman	Dave Andrews, Pvmt. Engineering
Dennis Kuchler, State Constr. Engr.	Bob Cales, Contract Admin.
Ron Heustis, Constr. Mgmt.	John Wright, Roadway Services
Larry Rust, Traffic Control	Anne Rearick, Structural Services
Ron Walker, Materials Mgmt.	Jim Keefer, Fort Wayne Dist.

Also in attendance were the following:

Mike Milligan, Secretary	David Unkefer, FHWA
Steve Apple, Indiana Sign & Barricade	Joe Novak, INDOT
Doug Nagel, NES/RoadSafe	Paul Berebitsky, ICA

GENERAL ITEMS OF DISCUSSION

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SPECIFICATIONS AND STANDARD DRAWING ITEMS

<u>Item No.</u>	<u>Sponsor</u>	<u>Page No.</u>
Item 18-2	Mr. Kuchler	7
203.03	Rock Excavation	
Action:	Passed as submitted	
Item 08-8-1	Mr. Heustis	8
109.05	<i>Payment for Extra Work and Force</i>	
	<i>Account Work</i>	
109.05(a)	<i>Agreed Price</i>	
109.05(b)	<i>Force Account</i>	
109.05(a)(b)1	<i>Labor Costs</i>	
109.05(b)(b)2	<i>Bond and Insurance</i>	
109.05(e)(b)3	<i>Materials</i>	
109.05(d)(b)4	<i>Equipment</i>	
109.05(e)(b)5	<i>Miscellaneous</i>	
109.05(f)(b)6	<i>Subcontracting</i>	
109.05(g)(b)7	<i>Compensation</i>	
109.05(h)(b)8	<i>Statements</i>	
109.05(i)	<i>Cost Breakdown</i>	
Action:	Passed as submitted	

RECURRING SPECIAL PROVISION ITEMS

Item 08-8-2	Mr. Heustis	12
107-C-029	EQUAL EMPLOYMENT OPPORTUNITY TRAINEE PROGRAM	
Action:	Passed as submitted	
Item 08-8-3	Mr. Heustis	14
203-R-XXX	APPROVAL OF BORROW AND DISPOSAL SITES	
Action:	Passed as revised	
Item 08-8-4	Mr. Walker	29
400-R-547	HMA REVISIONS FOR 2008	
Action:	Withdrawn	
Item 08-8-5	Mr. Heustis	34
625-R-194	<i>SECTION 625 - GABIONS AND REVET MATTRESSES</i>	
Action:	Passed as revised	
Item 08-8-6	Mr. Heustis	38
808-R-XXX	PERFORMANCE BASED PAINT PAVEMENT MARKINGS	
Action:	Passed as revised	

DESIGN MANUAL ITEMS

Item 08-8-7	Mr. Wright	43
Design Manual	51-7.0 Bicycle Facilities	
Action:	Passed as submitted	

cc: Committee Members (11)
FHWA (1)

GENERAL POINTS OF DISCUSSION

Mark Miller, Committee Chair, announced the plan to create an 805 Specification Subcommittee. After some discussion, Ron Heustis moved that Larry Rust be empowered to form a committee representing various divisions to meet this task. Bob Cales seconded the motion. The motion carried 9-0.

Mr. Miller announced that the Document Management Committee will be meeting on April 16 to discuss the special provision process, among other things. The Document Management Committee will give a progress update at the April 17 Standards Committee Meeting.

Mr. Miller asked that Tom Duncan of FHWA be included in Document Management Committee correspondence.

Mr. Miller asked Ron Walker to update the Committee on the status of the PWL specification revisions.

Mr. Walker said that the intent of the PWL specifications was to move toward use of statistical analysis of test data to determine pay factors. Mr. Walker added that it is not the intent of INDOT to adopt a contractor acceptance specification at this time.

Mr. Walker said that the PWL specification proposal will be ready for the May Standards Committee Meeting.

GENERAL ITEMS OF DISCUSSION

APPROVAL OF FEBRUARY 21, 2008 MINUTES.

Other sections containing
specific cross references:

None

Recurring Special Provisions
potentially affected:

None

Motion: Mr. Andrews
Second: Ms. Rearick
Ayes: 9
Nays: 0

General Instructions to Field Employees

Update Required? Y___ N___

By - Addition or Revision

Frequency Manual

Update Required? Y___ N___

By - Addition or Revision

Standard Sheets potentially affected:

None

Action: Passed as submitted

___ RSP Effective: _____ Letting

___ RSP Sunset Date: _____

___ RPD Effective: _____ Letting

___ 20__ Standard Specifications Book

___ 20__ Standards Edition

___ 20__ Design Manual

___ Technical Advisory

Withdrawn _____

Received FHWA Approval? _____

GENERAL ITEMS OF DISCUSSION
STANDARDS COMMITTEE SCHEDULE

Std Comm Mtg Date	Agenda Items Due (-27 days)	Draft Agenda Distributed (-21 days)	Final Agenda Distributed & Published (-7 days)	1st Draft Minutes Distributed (+7 days)	Comments Due for 1st Draft Minutes (+14 days)	Final Draft Minutes Distributed (+21 days)	Approved Minutes Published (+35 days)
02/21/08				02/26/08	03/05/08	03/13/08	03/27/08
03/20/08	03/07/08	03/13/08	03/13/08	03/27/08	04/03/08	04/10/08	04/24/08
04/17/08	03/20/08	03/27/08	04/10/08	04/24/08	05/01/08	05/08/08	05/22/08
05/15/08	04/18/08	04/24/08	05/08/08	05/22/08	05/29/08	06/05/08	06/26/08
06/19/08	05/23/08	05/29/08	06/12/08	06/26/08	07/03/08	07/10/08	07/24/08
07/17/08	06/20/08	06/26/08	07/10/08	07/24/08	07/31/08	08/07/08	08/28/08
08/21/08	07/25/08	07/31/08	08/14/08	08/28/08	09/04/08	09/11/08	09/25/08
09/18/08	08/22/08	08/28/08	09/11/08	09/25/08	10/02/08	10/09/08	10/23/08
10/16/08	09/19/08	09/25/08	10/09/08	10/23/08	10/30/08	11/06/08	11/26/08
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03/19/09	02/20/09	02/26/09	03/12/09	03/26/09	04/02/09	04/09/09	04/23/09
04/16/09	03/20/09	03/26/09	04/09/09	04/23/09	04/30/09	05/07/09	05/28/09
05/21/09	04/24/09	04/30/09	05/14/09	05/28/09	06/04/09	06/11/09	06/25/09
06/18/09	05/22/09	05/28/09	06/11/09	06/25/09	07/02/09	07/09/09	07/23/09
07/16/09	06/19/09	06/25/09	07/09/09	07/23/09	07/30/09	08/06/09	08/27/09
08/20/09	07/24/09	07/30/09	08/13/09	08/27/09	09/03/09	09/10/09	09/24/09
09/17/09	08/21/09	08/27/09	09/10/09	09/24/09	10/01/09	10/08/09	10/22/09
10/15/09	09/18/09	09/24/09	10/08/09	10/22/09	10/29/09	11/05/09	11/25/09
11/19/09	10/23/09	10/29/09	11/12/09	11/25/09	12/03/09	12/10/09	12/23/09
12/17/09	11/20/09	11/25/09	12/10/09	12/23/09	12/31/09	01/07/10	01/21/10

- Note 1: Agenda items must be accompanied by a Proposal sheet and must be submitted to the Division of Construction Management Data Specialist by the Agenda Items Due date for inclusion in the agenda
- Note 2: May meetings are the last opportunity for approval of items to be included in September lettings
- Note 3: 11/20/08 meeting is last meeting for approval of items to be included in 2010 Standard Specifications

GENERAL ITEMS OF DISCUSSION

STANDARDS COMMITTEE SCHEDULE (CONTINUED).

COMMITTEE COMMENTS ON THIS ITEM:

Mr. Heustis discussed the new organization of the agenda and explained the new schedule regarding meeting agenda and minutes.

Paul Berebitsky commented that 7 days notice for final agenda did not allow ICA adequate time for comments.

Mr. Heustis noted that ICA would be added to the distribution list for the Draft Agenda to be published 21 days prior to the meeting.

Other sections containing
specific cross references:

None

General Instructions to Field Employees

Update Required? Y___ N___

By - Addition or Revision

Frequency Manual

Update Required? Y___ N___

By - Addition or Revision

Recurring Special Provisions
potentially affected:

None

Standard Sheets potentially affected:

None

Motion: Mr. Heustis

Second: Mr. Cales

Ayes: 9

Nays: 0

Action: Passed as submitted

___ RSP Effective: _____ Letting

___ RSP Sunset Date: _____

___ RPD Effective: _____ Letting

___ 20__ Standard Specifications Book

___ 20__ Standards Edition

___ 20__ Design Manual

___ Technical Advisory

Withdrawn _____

Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 203, BEGIN LINE 15, DELETE AND INSERT AS FOLLOWS:

203.03 Rock Excavation

Rock excavation shall consist of igneous, metamorphic, and sedimentary rock *or other sound mineral matter* which cannot be readily excavated ~~without blasting;~~ by the use of a ~~power shovel~~ *crawler mounted hydraulic excavator of not less than 40,000 pounds gross operating weight equipped with a general purpose excavator bucket of not less than 1 cu yd (0.76 m³) capacity, properly used, having adequate power and in satisfactory running condition;* ~~or the use of other equivalent powered equipment and operated in accordance with the manufacturers recommended operating instructions.~~ Rock excavation shall also include all boulders ~~or~~ *and* other detached stones each having a volume of 1/2 cu yd (0.4 m³) or more.

Other sections containing
specific cross references:

203.07 Pg 133
203.15 Pg 141

Recurring Special Provisions
potentially affected:

None

Motion: Mr. Kuchler
Second: Mr. Heustis
Ayes: 9
Nays: 0

General Instructions to Field Employees
Update Required? Yes
By - Revision
Frequency Manual
Update Required? No

Standard Sheets potentially affected:

None

Action: Passed as submitted; revised

___ RSP Effective: _____ Letting
RSP Sunset Date: _____
___ RPD Effective: _____ Letting
 x 2010 Standard Specifications Book
___ 20__ Standards Edition
___ 20__ Design Manual
___ Technical Advisory

Received FHWA Approval? Yes

REVISION TO 2008 STANDARD SPECIFICATIONS

SECTION 109, BEGIN LINE 501, DELETE AND INSERT AS FOLLOWS:

109.05 Payment for Extra Work and Force Account Work

Extra work performed in accordance with 104.03 will be paid for by one of the following methods:

(a) Agreed Price

Extra work performed in accordance with 104.03 will be paid for at the agreed upon unit prices or lump sum prices as approved on the change order documented on approved change order. The Contractor shall, when directed, furnish a cost breakdown to substantiate a unit price or lump sum price.

(b) Force Account

However, the The Department may require the Contractor to ~~do such~~ perform extra work on a force account basis when a price cannot be agreed upon in accordance with 109.05(a). The Contractor shall, when directed, submit a written proposal for the extra work prior to the start of the work. When directed, the proposal shall include the planned labor, materials, equipment, and schedule for the work. Extra work performed by force account will be documented on an approved change order and will ~~to~~ be compensated in the following manner:

(a) 1. Labor Costs

For all labor and foremen in direct charge of the specific operations, the Contractor will receive the rate of wage, or scale, agreed upon in writing before beginning work for each hour that said labor and foremen are actually engaged in such work.

The Contractor will receive the actual costs paid to, or in behalf of, workmen by reasons of subsistence and travel allowances, worker's compensation insurance premiums, unemployment insurance contributions, social security taxes, health and welfare benefits, pension fund benefits, or other benefits when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work. The Contractor shall furnish satisfactory evidence of the rate or rates paid for insurance premiums and tax.

An amount equal to 20% of the sum of the above items will also be paid the Contractor.

(b) 2. Bond and Insurance

For bond premium and property damage and liability insurance premiums, the Contractor will receive the actual cost, to which cost 10% will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such bond premium and insurance premiums.

(c) 3. Materials

For materials accepted and used, the Contractor will receive the actual cost of such materials delivered on the work, including transportation charges paid by the Contractor, exclusive of machinery rentals as hereinafter set forth, to which cost 12% will be added.

~~(d)~~ 4. Equipment

For Contractor owned machinery or special equipment other than small tools as defined herein, the rates shall be not more than those listed in the current Rental Rate Blue Book as published by ~~Dataquest, Inc.~~ *EquipmentWatch®*. *The rate used shall be the FHWA hourly rate which is the ownership cost rate plus the operating cost rate.* Regardless of the time used, ~~this~~ *the ownership cost rate shall be the hourly rate obtained by dividing the monthly Blue Book rate by 176 with appropriate adjustments made for region and age. Actual fuel, lubricant and transportation costs may be added to the rental cost FHWA rate.* Small tools will be defined as tools costing less than \$500 each, or an aggregate total of \$1,000 or less.

For machinery or special equipment not owned by the Contractor, the rate shall be as shown on invoices. Actual fuel, lubricant and transportation costs may be added to the rental cost. *The Engineer may designate the use of the fuel percentage of the Rental Rate Blue Book operating cost rate in lieu of actual fuel and lubricant costs. No payment will be made for repairs to rented equipment.*

For equipment that is operational, on-site, and necessary for force account work, but is idle due to conditions beyond the control of the Contractor, a standby rate will apply. The standby rate will also apply during the period of transportation and on-site assembly and disassembly of the equipment for transportation purposes. The standby rate will be the published ownership cost rate reduced by 50 percent. Standby time will not be paid for in excess of 8 hours per day minus the number of hours paid for at the FHWA rate per day; or 40 hours per week minus the number of hours paid for at the FHWA rate per week. If rented equipment necessary for force account work is idle, the Department will pay the Contractor for the actual invoice rates for the duration of the idle period.

The Contractor shall provide a list of all information needed to verify the Blue Book rental rate for each piece of equipment. The information shall include the equipment type, manufacturer name, model number, year, any attachments used, and any other information necessary to determine the proper rate.

The Contractor will receive payment for the total costs agreed upon to which sum 12% will be added.

~~(e)~~ 5. Miscellaneous

No additional allowance will be made for general superintendence or other costs for which no specific allowance is herein provided.

~~(f)~~ 6. Subcontracting

For administration costs in connection with approved subcontract work, the Contractor shall receive an amount equal to 10% of the first \$3,000 and 7% thereafter, or the total cost of such work computed as set forth above.

~~(g)~~ 7. Compensation

The Contractor and the Engineer shall compare records of the cost of work done as ordered on a force account basis at the end of each day. These records shall be made in duplicate and signed by both. Each shall retain one copy.

~~(h)~~ 8. Statements

No payment will be made for work performed on a force account basis until the Contractor has furnished triplicate itemized statements of the cost of such force account work detailed as follows:

- 1- a. name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman;
- 2- b. designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment;
- 3- c. quantities of materials, prices, and extensions;
- 4- d. transportation of materials;
- 5- e. cost of property damage, liability and worker's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by receipted invoices for all materials used and for transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from its stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

If the Contractor fails or refuses to prosecute extra *work* or force account work as directed, the Department may withhold payment of all current estimates until the Contractor's failure or refusal is eliminated.

~~(i) Cost Breakdown~~

~~In case the work is performed as extra work, the Contractor shall, when directed, furnish a cost breakdown to substantiate a lump sum price or unit price.~~

REVISION TO 2008 STANDARD SPECIFICATIONS

SECTION 109, CONTINUED.

Other sections containing
specific cross references:

104.03	Pg 28	105.10	Pg 44
109.04(a)	Pg 98	202.04	Pg 120
203.28	Pg 158	206.11	Pg 176
401.18	Pg 234	410.22	Pg 278
501.25	Pg 287	501.31	Pg 295
502.23	Pg 306	914.08(c)	Pg 826

Recurring Special Provisions
potentially affected:

None

Motion: Mr. Heustis
Second: Mr. Cales
Ayes: 9
Nays: 0

General Instructions to Field Employees

Update Required? Yes

By - Revision

Frequency Manual

Update Required? No

Standard Sheets potentially affected:

None

Action: Passed as submitted

☒ RSP Effective: July 2008 Letting
RSP Sunset Date: _____
☐ RPD Effective: _____ Letting
☒ 2010 Standard Specifications Book
☐ 20__ Standards Edition
☐ 20__ Design Manual
☐ Technical Advisory

Received FHWA Approval? Yes

REVISED RECURRING SPECIAL PROVISION

~~09-01-07~~

~~107-C-029 EQUAL EMPLOYMENT OPPORTUNITY TRAINEES~~

~~(Revised 09-01-05)~~

~~A total of _____ training hours are assigned to this contract.~~

~~This requirement does not apply if the Contractor is participating in the pilot program as approved by the Department.~~

07-01-08

107-C-029 EQUAL EMPLOYMENT OPPORTUNITY TRAINEE PROGRAM

(Revised XX-XX-XX)

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 138, INSERT AS FOLLOWS:

When the project is funded in total or in part by the United States Government and no Equal Employment Opportunity hours are shown in the Proposal book, the Contractor shall participate in the Department's Equal Employment Opportunity Trainee Program. Requirements for participation in the program are available on the Department's website or from the Department's Equal Opportunity Division. Failure by the Contractor to comply with this requirement may result in reduction or loss of prequalification to bid for future work.

REVISED RECURRING SPECIAL PROVISION

 107-C-029 EQUAL EMPLOYMENT OPPORTUNITY TRAINEES (CONTINUED).

 Other sections containing
specific cross references:

None

General Instructions to Field Employees
Update Required? NoFrequency Manual
Update Required? NoRecurring Special Provisions
potentially affected:

None

Standard Sheets potentially affected:

None

Motion: Mr. Heustis
Second: Mr. Andrews
Ayes: 9
Nays: 0

Action: Passed as submitted

☒ RSP Effective: July 17, 2008 Letting
 RSP Sunset Date: _____
☐ RPD Effective: _____ Letting
☒ 2010 Standard Specifications Book
☐ 20__ Standards Edition
☐ 20__ Design Manual
☐ Technical Advisory

Received FHWA Approval? Yes

NEW RECURRING SPECIAL PROVISION

07-01-08

203-R-XXX - APPROVAL OF BORROW AND DISPOSAL SITES
(Adopted xx-xx-xx)

The Standard Specifications are revised as follows:

SECTION 201, BEGIN LINE 3, INSERT AS FOLLOWS:

201.01 Description

This work shall consist of clearing, grubbing, removing, and disposing of all vegetation and debris, except such objects as are designated to remain or are to be removed in accordance with other sections of these specifications, within the construction limits shown on the plans. If no construction limits are shown, the right-of-way and easement areas will be the construction limits. This work shall include the preservation from injury or defacement of all vegetation and objects designated to remain. *Disposal of material shall be in accordance with 203.08.*

SECTION 201, BEGIN LINE 43, DELETE AND INSERT AS FOLLOWS:

Unless burned in accordance with the requirements herein, perishable materials and debris shall be removed from the right-of-way and disposed of ~~at locations off the construction site and outside the limits of view from the traveled roadway in accordance with 203.08. If permitted, sod~~ Sod may be disposed of within the right-of-way, but outside the construction limits, ~~if permitted. Written permission shall be obtained from the property owner on whose property the materials and debris are to be placed. All necessary arrangements shall be made with the owner for obtaining suitable disposal locations. The cost involved shall be included in the contract price of pay items.~~

SECTION 202, BEGIN LINE 13, DELETE AND INSERT AS FOLLOWS:

202.02 General Requirements

All buildings and foundations in accordance with 202.06, structures, fences, tanks, and other obstructions, any portions of which are on the right-of-way shall be razed, removed, and disposed of, except utilities and those features for which other provisions have been made for removal. Designated salvageable material shall be removed without unnecessary damage in sections or pieces which may be transported readily and shall be stored at specified places within the project limits or as otherwise designated. ~~Unless otherwise permitted and except~~ Except for regulated materials, which ~~are defined in~~ shall be disposed of in accordance with 104.06, and bridge painting debris which is subject to 619, non-salvageable material shall be disposed of in accordance with 203.08 ~~State, Federal, and local regulations. Unregulated material that may be disposed of on private property, other than approved landfill sites, shall only be done with written approval of the Engineer and the property owner with appropriate permits and shall be outside the limits of view from the traveled roadway. Copies of all agreements with property owners shall be furnished.~~ Unsuitable material shall be removed from cisterns, septic tanks, other tanks, basements, and cavities. The disposition of this material shall be in accordance with all applicable and current State, Federal, and Local Regulations.

SECTION 203, BEGIN LINE 49, DELETE AND INSERT AS FOLLOWS:

203.08 Borrow or Disposal

Borrow shall consist of approved material required for the construction of embankments or for other portions of the work and shall be obtained from approved locations and sources outside the right-of-way. Borrow material shall be free of substances that will form deleterious deposits, or produce toxic concentrations or combinations that may be harmful to human, animal, plant or aquatic life, or otherwise impair the designated uses of ~~the-a~~ stream or area. Unless otherwise designated in the contract, arrangements shall be made for obtaining borrow. Borrow, as designated herein, shall not include material excavated beyond the right-of-way limits at intersecting public roads, private and commercial drive ~~approaches, nor approaches and~~ material furnished as B borrow.

Disposal of waste material, other than regulated material, from within the right-of-way shall only be allowed at approved locations either within or outside the right-of-way. Disposal of regulated material shall be in accordance with 104.06.

~~—Proposed borrow sites and proposed disposal sites for excavated material shall be identified before such material is excavated or disposed of within or outside the right-of-way.~~

Except where ~~a permitted or~~ a licensed commercial site *or a permitted site* is utilized for borrow or disposal, the Contractor shall obtain all permits required by local, state and federal laws prior to the start of any operations at the site.

Licensed commercial sites and permitted sites are defined as follows:

- (a) *A licensed commercial site is a solid waste facility with a current IDEM operating number.*
- (b) *A permitted site is a location that is operated under all permits required by local, state and federal laws for the activities proposed by the Contractor. A permitted site shall also have documentation that a wetlands, delineation and an archaeological survey have been performed by qualified professionals.*

For proposed borrow or disposal sites other than licensed commercial or permitted sites, an inspection of areas outside the construction limits shall be conducted by a qualified wetland professional approved by the Department to determine if wetlands are present on the site. An approved wetland professional shall be prequalified with the Department to perform environmental services work type 5.4 Ecological Surveys or shall be certified by the Society of Wetland Scientists as a wetland professional-in-training or professional wetland scientist. A list of approved wetland professionals is maintained on the Department's website. This-The wetlands inspection shall be in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands. The inspection shall also determine if isolated wetlands as defined by the IDEM are present. The Contractor shall submit a document, signed by the wetland professional, verifying that the site has been inspected for the presence of wetlands in accordance with the federal manual and for isolated wetlands and, if any are present, specifying the area to be demarcated as jurisdictional waters and/or wetland. The Contractor shall demarcate in a method approved by the Engineer the boundary of all wetlands identified within the proposed borrow or disposal site. Once the area to be used for borrow or for disposal of excavated material has been shown not to contain jurisdictional or isolated wetlands, the

~~boundary of the area cleared shall be demarcated. The methods of demarcation shall be as approved by the Engineer.~~

For proposed borrow or disposal sites other than licensed commercial or permitted sites, a qualified archaeologist shall perform a record check and field survey to determine if any significant archaeological sites exist within the proposed site. The Indiana Department of Natural Resources Division of Historic Preservation and Archeology maintains a roster of qualified archeological consultants. If any archaeological sites are identified, the archaeologist shall establish the limits of the site along with a reasonable border. The Contractor shall demarcate in a method approved by the Engineer the border of all archeological sites identified within the proposed borrow or disposal site.

Identified archeological sites shall not be disturbed unless the site is cleared by established procedures and written authorization to enter the site has been obtained by the Contractor. Under no circumstances shall an employee of the Contractor or the State of Indiana share in the ownership or profit from the sale of any archaeological artifacts that may be salvaged.

~~The Department maintains a list of professional consultants who are prequalified to perform various types of work. A qualified wetland professional shall be a professional consultant who is prequalified with the Department to perform Environmental Services work type 5.4 Ecological Surveys, or is certified by the Society of Wetland Scientists, SWS, as a wetland professional in training or professional wetland scientist. The Department's list of prequalified professional consultants is located at <http://www.in.gov/dot/div/legal/rfp/eligiblefirms.xls>.~~

~~Previously approved sites may be utilized for borrow or disposal operations if the Contractor furnishes a valid permit or document signed by a wetland professional prior to utilizing the site.~~

Borrow and disposal sites shall be approved by the Engineer prior to the start of any earth disturbing operations at the site. A request for approval of a borrow or disposal site shall be submitted to the Engineer a minimum of 14 days prior to the Contractor's planned start of operations at the site. All requests for approval of a borrow or disposal site shall include a description of the Contractor's planned operations at the site. In the case of disposal sites, the description shall include a listing of the types of material to be disposed of at the site.

A request for approval of a licensed commercial site shall include the following:

- (a) The name and address of the facility.*
- (b) The IDEM operating number.*
- (c) The expiration date of the IDEM operating permit.*

A request for approval of a permitted site shall include the following:

- (a) Name of the site owner.*
- (b) Address of the site.*
- (c) A list of the permits, permit numbers and permit expiration dates for all permits under which the site operates.*

- (d) Documentation that a wetlands delineation and an archaeological survey have been performed by qualified professionals.

A request for approval of a site, other than a licensed commercial or permitted site, shall include the following:

- (a) *Name of the property owner.*
- (b) *Address or location of the site.*
- (c) *A copy of a right-of-entry obtained from the property owner. Rights-of-entry shall include rights for access by Department personnel to the site for the purposes of monitoring, measurement and sampling.*
- (d) *A site plan showing the site location, site dimensions, adjacent property and right-of-way lines, all demarcated jurisdictional wetlands or isolated wetlands, all demarcated archeological sites, existing and proposed finished contours and proposed finished slope grades.*
- (e) *A site operations plan detailing the operations proposed for the site, what equipment will be utilized, how the site will be accessed and any other information relevant to the operation of the site.*
- (f) *A copy of the Rule 5 Notice of Intent, if required under 327 IAC 15-5.*
- (g) *An erosion control plan for the site including the types of erosion control measures to be incorporated and the sequencing of the measures in respect to the operations plan for the site.*
- (h) *Documentation signed by a wetlands professional verifying that the site has been inspected for the presence of both wetlands and isolated wetlands and, if any are present, specifying the area to be demarcated as jurisdictional or isolated wetlands.*
- (i) *Documentation of the archeological record check and field survey signed by a qualified archeologist including the limits and border of any archeological site discovered.*
- (j) *Copies of all other permits obtained by the Contractor to perform operations at the site.*

The Contractor shall provide the Engineer a minimum of 14 days notice prior to opening borrow areas for the purpose of obtaining original cross section elevations and measurements and to sample the borrow material prior to use.

The Contractor shall install temporary erosion and sediment control measures at borrow or disposal sites other than licensed commercial and permitted sites prior to the start of any earth disturbing activity. ~~If the Contractor elects to use the site, all required permits shall be obtained.~~ The Contractor shall develop and construct all mitigation measures necessary to ~~and fulfill all the requirements detailed by such of all~~ permits obtained by the Contractor for operation of a borrow or disposal site. ~~The Contractor shall also obtain written permission from the land owner for Department personnel to access the site for monitoring.~~

No excavation shall occur or no material shall be disposed of ~~beyond~~ within the boundaries of the demarcated wetlands and archeological areas unless the operations are in compliance with all required permits and these specifications.

No extension of completion time will be granted due to any delays by the Contractor in securing approval of borrow or disposal sites.

~~Before borrow or disposal operations are begun, the Contractor shall submit operation plans for approval. Such plans shall include the following:~~

- ~~—— (a) a detailed sketch showing the limits relative to property and right-of-way lines;~~
- ~~—— (b) the grade of all slopes;~~
- ~~—— (c) an erosion control plan in accordance with the requirements of 327 IAC 15-5;~~
- ~~—— (d) the encasement, finished grading, and seeding procedures; and~~
- ~~—— (e) archaeological clearance.~~

~~Notice shall be given in advance of opening borrow areas so that cross section elevations and measurements of the ground surface after stripping may be taken and the borrow material may be tested before being used.~~

~~Except when a commercial source is utilized, a qualified archaeologist shall perform a record check and field survey of borrow or disposal limits to determine if any significant archaeological sites are within the limits. Results of the record check and survey shall be furnished in writing prior to the excavation of any material. If any archaeological sites are identified, the archaeologist shall establish the limits of the site along with a reasonable border. The site shall not be disturbed unless the archaeological site is cleared by established procedures and written authorization to enter the site has been issued. Under no circumstances shall an employee of the Contractor or the State of Indiana share in the ownership or profit from the sale of any archaeological artifacts that may be salvaged. No extension of completion time will be granted due to any delays in securing approval of a borrow or disposal site.~~

Approval of a proposed borrow or disposal site by the Engineer, whether the proposed site is commercial, permitted, or otherwise, shall not relieve the Contractor of its responsibility to utilize an appropriate site and to comply with all Local, State and Federal laws and regulations.

SECTION 203, BEGIN LINE 286, DELETE AND INSERT AS FOLLOWS:

203.10 Disposal of Excavated Material Except Waterway and Peat Excavation

Excavation material shall be used for the construction of embankments, shoulders, special fill, or other places as may be specified or directed, depending on the nature of the material. Excavated material that is suitable for embankment construction that is not required for maintenance of traffic shall be placed in the embankment before placing any borrow material, unless otherwise authorized in writing.

If more material is excavated from within required cut slopelines than is needed to construct embankments or special fills, the excess may be used to widen embankments, flatten fill slopes, or be used otherwise as directed. All excess excavated material that cannot be used constructively within the project limits shall be disposed of off the right-of-way in accordance with ~~201.03 and~~ 203.08.

Excavation obtained from the right-of-way and planned to be used in fills may be wasted and replaced with borrow with no additional payment only after written permission is obtained. All required samples of the borrow or the excavation materials involved shall be furnished with no additional payment.

203.11 Disposal of Waterway Excavation

Unless otherwise provided, material resulting from waterway excavation shall be used ~~to fill old channels and~~, if suitable, in embankment, special fill, and approach embankments, or any combination of these, as specified or directed.

~~A~~ Any portion of waterway excavation *material* which is unsuitable for the above uses, ~~a~~ any portion which is suitable but is in excess of that required for such uses, or ~~if~~ *when* locations for such ~~disposal-uses~~ are not available, the ~~disposal material~~ shall be *disposed of* in accordance with ~~201.03~~ 203.08.

203.12 Disposal of Peat

All material removed as peat excavation, removed or displaced by machine operation, or displaced by the advancing backfilling material shall be ~~uniformly spread between the toes of fill slopes and the swamp ditches or beyond, or otherwise~~ disposed of in accordance with 203.08.

NEW RECURRING SPECIAL PROVISION

203-R-XXX - APPROVAL OF BORROW AND DISPOSAL SITES (CONTINUED).

COMMITTEE COMMENTS ON THIS ITEM:

Mr. Heustis passed out an addition to the agenda item (Revision of 202.02).

A checklist for field use is attached (pages 21-24).

This proposal necessitates revision of RSP 108-C-192 (attached pages 25-28).

This is an interim solution. The intent is to eventually revise 203.08 and associated references and better organize all environmental references in the Standard Specifications.

Mr. Heustis recommended creation of RSP that would exist until 203.08 is revised.

Mr. Miller asked Mr. Heustis to work up revisions to agenda item and RSP 108-C-192 for the minutes.

Other sections containing
specific cross references:

201, 202, 203

General Instructions to Field Employees
Update Required? Yes
By - Revision
Frequency Manual
Update Required? No

Recurring Special Provisions
potentially affected:

108-C-192

Standard Sheets potentially affected:

None

Motion: Mr. Heustis
Second: Mr. Keefer
Ayes: 9
Nays: 0

Action: Passed as revised

 x RSP Effective: July 2008 Letting
RSP Sunset Date: _____
 RPD Effective: _____ Letting
 20 Standard Specifications Book
 20 Standards Edition
 20 Design Manual
 Technical Advisory

Received FHWA Approval? Yes

Indiana Department of Transportation
Request for Approval of Borrow or ~~Excavation~~ Disposal Site
Under Section 203 of the Standard Specifications

Part I – Contract, Site and Permit Information *(To be completed by the Contractor)*

Date: _____

Contract: _____

Contractor: _____

District: _____

Proposed Site is for (check one): ☐ Borrow ☐ ~~Excavation~~ Disposal ☐ Both

A. Complete this section for all borrow/disposal site requests. Check the appropriate box, 1, 2 or 3. If box 1 or 2 is checked, skip section **B** and complete section **C**.

1. ☐ The proposed Site is a solid waste facility listed with IDEM.

a) Name of facility: _____

b) Address of facility: _____

c) IDEM Operating Number: _____ Exp. Date: _____

2. ☐ The proposed Site is not a facility listed with IDEM, but is legally permitted for the operations proposed by the Contractor.

a) Name of Site owner: _____

b) Address of Site: _____

c) The proposed Site is operated under one or more of the following permits:

☐ IDEM 401 Water Quality Certification

Permit No: _____ Exp. Date: _____

☐ Not Required (explain): _____

☐ US Army Corps of Engineers (USACE) Section 404 Clean Water Act

Permit No: _____ Exp. Date: _____

☐ Not Required (explain): _____

☐ IDNR Construction in Floodway

Permit No: _____ Exp. Date: _____

☐ Not Required (explain): _____

☐ IDEM Rule 5

Permit No: _____ Exp. Date: _____

☐ Not Required (explain): _____

☐ The Site has archeological clearance and written authorization to enter in accordance with 203.08. Attach copies.

☐ Not Required (explain): _____

3. ☐ The proposed Site is not currently a licensed commercial site or a permitted site as defined in 203.08. Complete sections **B** and **C** below.

B. Complete this section only if box 3 was checked in section **A**.

1. Name of the Site owner: _____

2. Location of the Site: _____

3. For a proposed disposal site, attach a list of materials to be disposed of at the Site.

4. Attach a right-of-entry signed by the property owner for the proposed work at the Site including access by the Department.

5. Attach a site plan for the proposed Site in accordance with 203.08.

6. Attach a copy of the operation plan for the proposed Site in accordance with 203.08.

7. Attach a copy of the wetlands delineation performed at the Site in accordance with 203.08.

8. Attach a copy of the archeological clearance and written authorization to enter the Site in accordance with 203.08.

9. Will there be impacts to wetlands or waters of the US at the Site?

☐ **Yes** – Attach copies of the following permits for the Site:

1. IDEM 401 Water Quality Certification – Exp. Date: _____

2. USACE 404 Permit – Exp. Date: _____

☐ Site is an isolated wetland and a USACE 404 Permit is not required.

☐ **No** – No permits are required.

5. Is the Site in a Floodway?

☐ **Yes** – Attach a copy of the IDNR Construction in a Floodway Permit for the Site.

Exp. Date: _____

☐ **No** – No permit is required.

6. Will more than one acre of land at the Site be disturbed by borrow or disposal activities?

☐ **Yes** – Attach a copy of the IDEM Rule 5 Notice of Intent (NOI) for the Site.

Exp. Date: _____

☐ **No** – No permit is required.

8. Comments (attach additional sheets as necessary)

C. Complete the certification for all borrow/~~excavation~~ disposal site requests. Submit the request to the Project Engineer/Supervisor.

Certification

The Contractor hereby certifies that the proposed borrow or disposal site, as described above, has valid permits for the Contractor's proposed operations at the site in accordance with all local, state and federal laws and that the Contractor will only perform those operations at the site that are permitted.

Signed: _____

Title: _____

Printed Name: _____

Date: _____

**Indiana Department of Transportation
Request for Approval of Borrow or Disposal Site**

Part II. – Review and Approval *(To be completed by the Project Engineer/Supervisor)*

The Contractor’s request for approval of borrow or disposal site has been reviewed and is

☐ Approved

☐ Rejected

with the following comments (attach additional sheets as necessary.

The Department’s approval of this request is only for compliance with the contract provisions and in no way relieves the Contractor of any obligations under any local, state or federal regulations.

Signed: _____

Title: _____

Printed Name: _____

Date: _____

Cc: District Construction
District Environmental Scientist
Contractor
File

07-01-08

108-C-192 TEMPORARY EROSION CONTROL MEASURES

(Revised 03-20-08)

The Standard Specifications are revised as follows:

SECTION 108, BEGIN LINE 107, DELETE AND INSERT AS FOLLOWS:

An amended Erosion Control Plan shall be submitted in accordance with 327 IAC 15-5 for those areas not included in the Department submittal ~~or~~ as necessary for changes initiated by the Contractor. Items to include consist of sequencing of operations, *soil stockpile sites, equipment storage sites, batch plant sites, borrow and disposal areas,* and haul roads as well as any revision to the Department's submittal. *If borrow and stockpile sites are used, the Contractor shall indicate the erosion and sediment control measures to be implemented and the sequencing of the erosion and sediment control measures to be used on the sites. The Contractor shall also state where the spoil from the project, if any, will be placed. The Contractor shall provide this information following the guidelines for Rule 5 (327 IAC 15-5).*

Borrow and disposal sites shall be in accordance with 203.08.

The Contractor shall ~~also~~ submit ~~a~~ *the planned* sequencing of ~~the~~ erosion and sediment control measures to be used on the project to:

IDEM	Indiana Dept. of Transportation
Rule 5 Coordinator	Rick Phillabaum Senior Environmental Manager
100 N. Senate Avenue	Room N642
Mail Code 65-42 Rm 1255	100 N. Senate Avenue
Indianapolis, IN 46204	Indianapolis, IN 46204

When required by 327 IAC 15-5, ~~The borrow, stockpile, and spoil storage sites must~~ shall be permitted by ~~the~~ an IDEM Notice of Intent, (NOI). The Contractor shall submit either a new IDEM NOI or revise the original NOI for the project. A copy of the ~~revised NOI or the new or revised NOI~~ shall be ~~given~~ submitted to the Engineer prior to any operations at a stockpile or storage site.

All ~~required~~ information shall be submitted and approved prior to land disturbing activities. All appropriate erosion control items shall be in place prior to disturbing the project site. A copy of the amended plan shall be provided to the Engineer.

The Contractor shall designate one or more of its employees as an Erosion Control Supervisor. The Erosion Control Supervisor shall ~~to~~ be responsible for the preparation, submittal, and ensuring receipt of the approval of the amended erosion control plan. Such individual(s) shall also be responsible for obtaining all other necessary permits including the wetland inspection and archaeological record check and field survey in accordance with 203.08, and for all environmental inspections. Such individual(s) shall oversee the installation of all erosion control measures and shall conduct ~~regular~~ weekly and post-event inspections and perform all other tasks related to the installation, maintenance, and removal of erosion control measures. The Erosion

Control Supervisor shall accompany personnel from IDEM or other governmental agencies, as required, during site visits by those agencies. ~~and~~ The Erosion Control Supervisor shall be responsible for completion of all reports in accordance with 205.

A minimum of ~~10-14~~ days prior to commencing work, the Contractor shall prepare and submit to the Engineer, for approval, an erosion control plan that includes, at a minimum, the following items:

- (a) Locations of all proposed soil stockpiles, ~~borrow areas, or disposal areas.~~
- (b) Locations of all proposed ~~vehicle and~~ equipment ~~parking-storage~~ areas, ~~vehicle and equipment~~ fueling locations, ~~placement of the site~~ construction trailers, ~~location of all on-site~~ batch plants, and designated concrete truck washout areas.
- (c) Proposed construction sequence and phasing of erosion control measures.
- (d) Location of all construction entrances where vehicles and equipment will enter and exit the site.
- (e) Material handling and spill prevention plan, which shall include a list of expected materials that may be present on the site during construction operations, as well as a written description of how these materials will be handled to minimize the potential that the materials may enter the storm water runoff from the site.
- (f) Statements that the erosion control measures for the project shall, at a minimum, be inspected on a weekly basis and within 24 h of every 1/2 in. (13 mm) rain event.
- (g) Monitoring and maintenance plan for erosion control measures.

The erosion control plan shall be signed by the Erosion Control Supervisor. The Engineer will submit the erosion control plan, ~~for approval, to IDEM through~~ to the Department's Office of Environmental Services Permit Coordinator.

The name(s) of the ~~designated individual(s)~~ Erosion Control Supervisor shall be furnished the Engineer at, or prior to, the preconstruction meeting. Should the designated individual(s) need to be replaced during the contract, replacements shall be designated within seven calendar days and notification shall be furnished the Engineer.

Permanent erosion control measures shall be incorporated into the work at the earliest practicable time as the construction progresses to stabilize the site.

In order to minimize pollution to bodies of water, the practices and controls set out below shall be followed.

- (a) When work areas are located in or adjacent to bodies of water, such areas shall be separated by a dike or other barrier to keep contained. Sediment disturbance of these bodies of waters shall be minimized during the construction and removal of such barriers.

- (b) All waterways shall be cleared as soon as practicable of false-work, temporary piling, debris, or other obstructions placed during construction operations.
- (c) Water from aggregate washing or other operations containing sediment shall be treated by filtration, a settling basin, or other means sufficient to reduce the sediment content.
- (d) Pollutants such as fuels, lubricants, asphalt, sewage, wash water, or waste from concrete mixing operations, and other harmful materials shall not be discharged into existing bodies of water.
- (e) All applicable regulations and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the contract.

SECTION 108, AFTER LINE 177, INSERT AS FOLLOWS:

The cost of preparation of the erosion control plan shall be included in the cost of the various erosion and sediment control items.

SECTION 205, AFTER LINE 33, INSERT AS FOLLOWS:

Temporary erosion control measures shall be placed as soon as possible. Silt fence and sediment traps shall be installed prior to beginning earth disturbing activities.

Temporary seeding shall be placed on disturbed areas that are expected to be undisturbed for over 7 days or as directed by the Engineer.

Check dams shall be installed as soon as possible in areas of construction. Once ditches are to grade, permanent erosion control measures shall be placed as soon as possible and no later than 5 workdays after ditch grading is completed. During construction, if ditch flow patterns change, erosion control measures may need to be moved or adjusted so that no areas are left unprotected.

Pipe end sections and anchors shall be placed when the structure is installed. If the pipe end sections or anchors cannot be placed at the same time, temporary riprap splashpads shall be placed at the outlets of the pipes until the pipe end sections or anchors can be placed.

SECTION 205, AFTER LINE 108, INSERT AS FOLLOWS:

(o) Stable Construction Entrance

The Contractor shall provide a stable construction entrance at the points where construction traffic will enter onto an existing road. This entrance shall be a minimum of 12 ft wide, 50 ft long, and constructed of 12 in. of No. 2 stone. The radii shall be large enough to accommodate the vehicles utilizing the entrance. Additional stone may be required, as directed, to maintain the usefulness of the stable construction entrance. Where there is insufficient room for a stable construction entrance, other measures shall be taken to prevent the tracking of sediment onto the pavement.

SECTION 205, AFTER LINE 118, DELETE AND INSERT AS FOLLOWS:

205.04 Maintenance

Temporary erosion and sediment control measures shall be inspected by the Contractor's *Erosion Control Supervisor* once every seven days and after *each* rain ~~activities~~ *activity*. Inspections shall be documented and records shall be maintained by the Contractor, to be made available for review upon request. Records shall include, at a minimum, the date, the inspector's name, the maintenance and corrections needed based on this inspection, and the status of previously identified deficiencies. The temporary protection measures shall be returned to good working conditions within 48 hours after inspection or as directed. Sediment shall be removed as approved and disposed of in accordance with 201.03 and 203.08. *Inspection records shall be kept until the entire contract is complete and has been permanently stabilized.*

SECTION 205, AFTER LINE 148, INSERT AS FOLLOWS:

No. 2 stone for stable construction entrances will be measured by the ton (megagram) in accordance with 109.01(b).

SECTION 205, LINE 166, INSERT AS FOLLOWS:

for at the contract unit price per each unit installed. No. 2 stone for stable construction entrances will be paid for at the contract unit price per ton.

SECTION 205, AFTER LINE 176, INSERT AS FOLLOWS:

No. 2 StoneTON (Mg)

SECTION 205, AFTER LINE 213, INSERT AS FOLLOWS:

The cost of constructing, maintaining, and removal of the stable construction entrance shall be included in the cost of No. 2 stone.

REVISION TO RECURRING SPECIAL PROVISION

01-01-08

400-R-547 HMA REVISIONS FOR 2008

(Adopted 12-13-07)

The Standard Specifications are revised as follows:

SECTION 401, LINE 77, DELETE AND INSERT AS FOLLOWS:

~~Bulk Specific Gravity of Compacted Bituminous~~

~~Mixtures Using Automatic Vacuum Sealing ASTM D 6752~~

Bulk Specific Gravity and Density of Compacted Asphalt

Mixtures Using Automatic Vacuum Sealing AASHTO T 331

SECTION 401, LINE 90, INSERT AS FOLLOWS:

The optimum binder content for dense graded mixtures shall produce 4.0% air voids at N_{des} and for open graded mixtures shall produce 15.0% – 20.0% air voids at N_{des} . The design for dense graded mixtures shall have at least four points, including a minimum of two points above and one point below the optimum. A one point design may be used for open graded mixtures. The maximum specific gravity of the uncompressed mixture shall be determined in accordance with AASHTO T 209, *Section 9.5.1*.

SECTION 401, LINE 108, DELETE AND INSERT AS FOLLOWS:

A PG binder grade or source change will not require a new mix design. If the upper temperature classification of the PG binder is lower than the original PG grade, a new TSR value is required. A new DMF shall be submitted for a binder grade change and shall reference the originating DMF/JMF number.

The MAF equals the Gmm from the mixture design divided by the following: 2.465 for 9.5 mm mixtures and 2.500 for 12.5 mm, 19.0 mm, and 25.0 mm mixtures. If the MAF calculation results in a value where $0.980 \leq \text{MAF} \leq 1.020$, then the MAF shall be considered to be 1.000. ~~If the calculated MAF is outside of the above range, then the actual calculated value shall be used.~~ *If the MAF is greater than 1.020, the calculated MAF value shall have 0.020 subtracted from the value. If the MAF is less than 0.980, the calculated MAF value shall have 0.020 added to the value.* The MAF does not apply to OG mixtures.

SECTION 401, LINE 119, DELETE AS FOLLOWS:

~~Changes in the source of specified binders, except for PG 58-28 or PG 64-22, shall require a new DMF. Changes in the grade of a specified binder shall require a new DMF.~~

SECTION 401, LINE 178, DELETE AS FOLLOWS:

Acceptance of mixtures for binder content, VMA at N_{des} , and air voids at N_{des} for each lot will be based on tests performed by the Engineer. ~~Acceptance testing for surface mixtures will include tests for moisture content.~~ The Engineer will randomly select the location(s) within each subplot for sampling in accordance with ITM 802. An acceptance sample will consist of two plate samples with the first being at the random location and the second 2 ft (0.6 m) ahead station. A backup sample consisting of two plate samples

shall be located 2 ft (0.6 m) towards the center of the mat from the acceptance sample. ~~For surface mixtures, an additional sample shall be located 2 ft (0.6 m) back station from the random sample location.~~

SECTION 401, LINE 201, DELETE AND INSERT AS FOLLOWS:

The bulk specific gravity of gyratory specimens for dense graded mixtures will be determined in accordance with AASHTO T 166, *Method A* except samples are not required to be dried overnight. The bulk specific gravity of gyratory specimens for open graded mixtures, OG19.0, OG25.0, will be determined in accordance with ~~ASTM D 6752, except as follows. The duration of the test from initiating the vacuum extraction to weighing the specimen after the water bath will not exceed five minutes. The mass of water absorbed by the specimen while in the water bath will be subtracted from the mass of the specimen obtained in the water bath. Any test in which the mass of water absorbed by the specimen exceeds 5 g is invalid AASHTO T 331.~~

SECTION 401, LINE 211, DELETE AND INSERT AS FOLLOWS:

The mixture properties for each subplot shall meet the requirements for the tolerances from the JMF as shown in the table as follows:

ACCEPTANCE TOLERANCES	
MIXTURE PROPERTIES	TOLERANCES FROM THE JMF
DENSE GRADED	
Air Voids	JMF \pm 1.0%
Binder Content	JMF \pm 0.5%
VMA	JMF \pm 1.0%
OPEN GRADED	
Air Voids*	JMF \pm 3.0%
Binder Content	JMF \pm 0.5%
* Gmb will be determined in accordance with ASTM D 6752 AASHTO T 331	

SECTION 401, LINE 215, DELETE AS FOLLOWS:

~~The maximum percent of moisture in the mixture shall not exceed 0.10 from plate samples.~~

SECTION 401, LINE 225, DELETE AND ADD AS FOLLOWS:

Air voids, binder content and VMA values will be reported to the nearest 0.1%. ~~Moisture and d~~Draindown test results will be rounded to the nearest 0.01%. Rounding will be in accordance with 109.01(a).

SECTION 401, LINE 245, DELETE AND INSERT AS FOLLOWS:

Equipment for HMA operations shall be in accordance with 409. The Contractor shall submit to the Engineer a written ~~Certificate of Compliance~~ documentation that includes the manufacturer's make, model, serial number, manufactured year, and the manufacturer's literature with pictures. The ~~Certificate of Compliance~~ documentation shall be submitted prior to use and shall certify that the paving equipment proposed for the project is new and includes the modifications or have been modified in accordance with the following.

SECTION 401, LINE 403, DELETE AND INSERT AS FOLLOWS:

The density for the mixture will be expressed as the percentage of maximum specific gravity (%MSG) obtained by dividing the average bulk specific gravity by the maximum specific gravity for the subplot, times 100. *Samples for the bulk specific gravity and maximum specific gravity will be dried in accordance with ITM 572.* The Engineer will determine the ~~BSG~~ bulk specific gravity of the cores in accordance with AASHTO T 166, *Method A*. The maximum specific gravity will be determined in accordance with AASHTO T 209, *Section 9.5.1* ~~from samples prepared in accordance with ITM 572.~~ The target value for density of dense graded mixtures of each subplot shall be 92.0%.

SECTION 401, LINE 614, INSERT AS FOLLOWS:

Additional cores shall be taken within seven calendar days unless otherwise directed. Additional core locations will be determined by adding 1.0 ft (0.3 m) longitudinally of the cores tested using the same transverse offset. The appeal density cores will be tested in accordance with AASHTO T 166, *Method A*.

SECTION 402, LINE 52, DELETE AND INSERT AS FOLLOWS:

The MAF equals the Gmm from the mixture design divided by the following: 2.465 for 9.5 mm mixtures and 2.500 for 12.5 mm, 19.0 mm, and 25.0 mm mixtures. If the MAF calculation results in a value where $0.980 \leq \text{MAF} \leq 1.020$, then the MAF shall be considered to be 1.000. ~~If the calculated MAF is outside of the above range, then the actual calculated value shall be used.~~ *If the MAF is greater than 1.020, the calculated MAF value shall have 0.020 subtracted from the value. If the MAF is less than 0.980, the calculated MAF value shall have 0.020 added to the value.* The MAF does not apply to OG mixtures.

SECTION 402, LINE 346, INSERT AS FOLLOWS:

The Engineer will determine the bulk specific gravity of the cores in accordance with AASHTO T 166, *Method A*. The maximum specific gravity will be determined in accordance with AASHTO T 209, *Section 9.5.1*. Density shall not be less than 92.0%.

SECTION 410, LINE 84, INSERT AS FOLLOWS:

The optimum binder and aggregate gradation content shall produce 4.0% air voids. The maximum specific gravity of the uncompacted mixture shall be determined in accordance with AASHTO T 209, *Section 9.5.1*. The percent draindown for SMA surface mixture shall not exceed 0.30% in accordance with AASHTO T 305.

SECTION 410, LINE 89, DELETE AND INSERT AS FOLLOWS:

The MAF equals the Gmm from the mixture design divided by the following: 2.465 for 9.5 mm mixtures and 2.500 for 12.5 mm, 19.0 mm, and 25.0 mm mixtures. If the MAF calculation results in a value where $0.980 \leq \text{MAF} \leq 1.020$, then the MAF shall be considered to be 1.000. ~~If the calculated MAF is outside of the above range, then the actual calculated value shall be used.~~ *If the MAF is greater than 1.020, the calculated MAF value shall have 0.020 subtracted from the value. If the MAF is less than 0.980, the calculated MAF value shall have 0.020 added to the value.* The MAF does not apply to OG mixtures.

SECTION 410, LINE 137, DELETE AS FOLLOWS:

Acceptance of mixtures for binder content, ~~moisture~~, and gradation for each lot will be based on tests performed by the Engineer. The Engineer will randomly select the location(s) within each subplot for sampling in accordance with ITM 802.

Samples from each location shall be obtained from each subplot from the pavement in accordance with ITM 580. ~~The second sample shall be located from the random sample by offsetting 1 ft (0.3 m) transversely towards the center of the mat and will be used for the moisture sample.~~ The test results of the sublots will be averaged and shall meet the requirements for tolerances from the JMF for each sieve and binder content.

~~The maximum percent of moisture in the mixture shall not exceed 0.10 from plate samples.~~

SECTION 410, LINE 170, DELETE AS FOLLOWS:

Single test values and averages will be reported to the nearest 0.1% ~~except moisture will be reported to the nearest 0.01%.~~ Rounding will be in accordance with 109.01(a).

SECTION 410, LINE 313, INSERT AS FOLLOWS:

The density of the mixture will be expressed as the percentage of maximum specific gravity (%MSG) obtained by dividing the average bulk specific gravity by the maximum specific gravity for the subplot, times 100. *Samples for the bulk specific gravity and maximum specific gravity will be dried in accordance with ITM 572.* The Engineer will determine the BSG of the cores in accordance with AASHTO T 166, *Method A*. The maximum specific gravity will be determined in accordance with AASHTO T 209, *Section 9.5.1.* ~~from plant produced materials prepared in accordance with ITM 572.~~ The target value for density of SMA mixtures of each subplot shall be 93.0%.

The Engineer will determine the bulk specific gravity of the cores in accordance with AASHTO T 166, *Method A*. The maximum specific gravity will be determined in accordance with AASHTO T 209, *Section 9.5.1*. Density shall not be less than 92.0%.

SECTION 902, LINE 22, DELETE AND INSERT AS FOLLOWS:

~~Each Sample~~ *An acceptance sample and backup sample shall be taken from the asphalt delivery system at the HMA plant. Each sample* ~~The two samples~~ will represent a subplot. *A copy of a load ticket identifying the binder source shall be submitted with the subplot samples.* The Department will randomly select one subplot from each lot in accordance with ITM 802 for either complete or partial testing. If the subplot selected is in compliance, the lot will be accepted. If the subplot is not in compliance, the material will be adjudicated as a failed material in accordance with 105.03.

SECTION 904, LINE 127, INSERT AS FOLLOWS:

The fine aggregate angularity value shall not apply to OG mixtures.

REVISION TO RECURRING SPECIAL PROVISION

400-R-547 HMA REVISIONS FOR 2008 (CONTINUED).

COMMITTEE COMMENTS ON THIS ITEM:

Mr. Walker offered to withdraw this item and include with PWL specification proposal to be presented at May 15, 2008 Standards Committee Meeting.

Other sections containing
specific cross references:

401,402,410, 902, 904

Recurring Special Provisions
potentially affected:

See Above

Motion: M
Second: M
Ayes:
Nays:

General Instructions to Field Employees

Update Required? Y___ N___

By - Addition or Revision

Frequency Manual

Update Required? Y___ N___

By - Addition or Revision

Standard Sheets potentially affected:

None

Action: Withdrawn

REVISED RECURRING SPECIAL PROVISION

625-R-194 GABIONS AND REVET MATTRESSES

(Revised XX-XX-XX)

The Standard Specifications are revised as follows:

SECTION 625, BEGIN LINE 1, INSERT AS FOLLOWS:

SECTION 625 – GABIONS AND REVET MATTRESSES**625.01 Description**

This work shall consist of riprap filled wire mesh baskets, constructed in accordance with 105.03.

625.02 Submittals

The Contractor shall submit the following information to the Engineer at least 15 days prior to commencing gabion or revet mattress construction.

- (a) Type and source of basket material.*
- (b) Type and source of fastening and miscellaneous materials.*
- (c) Source of riprap.*
- (d) Construction method and sequence.*
- (e) A copy of the basket manufacturer's material and installation recommendations and instructions.*

MATERIALS**625.03 Materials**

Materials shall be in accordance with the following:

<i>Geotextile</i>	<i>918.02</i>
<i>Riprap.....</i>	<i>904.04*</i>
<i>Twisted Wire Mesh Gabions and Revet Mattresses</i>	<i>ASTM A 975</i>
<i>Welded Wire Mesh Gabions and Revet Mattresses.....</i>	<i>ASTM A 974</i>
<i>* Riprap shall be uniform riprap A in accordance with 904.04(f).</i>	

(a) Baskets, Fasteners, Spiral Binders, Lacing Wire and Stiffeners

Where metallic coating is specified, metallic coated gabion or revet mattress baskets may be fabricated from either twisted or welded wire mesh in accordance with ASTM A 974 Style 1, 2, 3 or 4 or in accordance with ASTM A 975 Style 1, 2 or 4.

Where PVC coating is specified, PVC coated gabion or revet mattress baskets may be fabricated from either twisted or welded wire mesh in accordance with ASTM A 974 Style 5 or in accordance with ASTM A 975 Style 3.

The Contractor may select baskets for the coating type specified from ~~any~~ either of the mesh types ~~and styles~~ listed above. ~~however, the~~ The ~~same~~ selected-mesh type ~~and style~~ shall be used throughout a gabion or revet mattress structure. Baskets shall be prefabricated by the manufacturer and assembled in the field. Fabrication of baskets on site from stock materials will not be permitted.

Fasteners, spiral binders, lacing wire and stiffeners shall be of the same style and shall satisfy the same requirements as those for the selected baskets.

A type A certification in accordance with 916 shall be provided for all components used in assembly of the baskets, including fasteners, spiral binders, lacing wire and stiffeners prior to use of the materials. The certification for material selected in accordance with ASTM A 974 shall include the following tests and results:

- 1. Diameter in inches (millimeters) of metallic coated wire for all components.*
- 2. Diameter in inches (millimeters) of PVC coated wire, if applicable, both prior to and after coating for all components.*
- 3. Mechanical properties in accordance with ASTM A 974 section 7.*
- 4. Physical properties in accordance with ASTM A 974 section 8.*
- 5. Dimensional tolerances in accordance with ASTM A 974 section 9.*

The certification for material selected in accordance with ASTM A 975 shall include the following results:

- 1. Mesh characteristics in accordance with ASTM A 975 section 6.*
- 2. Mechanical properties in accordance with ASTM A 975 section 7.*
- 3. Physical properties in accordance with ASTM A 975 section 8.*
- 4. Dimensional tolerances in accordance with ASTM A 974 section 9.*

(b) Soil Anchor Stakes

Soil anchor stakes for revet mattresses shall be in accordance with the revet mattress manufacturer's recommendations.

A type C certification in accordance with 916 shall be provided for soil anchor stakes prior to installation. The certification shall state that the soil anchor stakes supplied satisfy the testing requirements set out in the revet mattress manufacturer's recommendations.

CONSTRUCTION REQUIREMENTS

625.04 Construction

Excavation for gabion or revet mattress basket foundations shall be as shown on plans and in accordance with 203.08 and 206.01 through 206.09. Excavation for toe walls or cut-off walls shall be made to the neat lines as shown on the plans.

Where required, geotextile fabric shall be placed in accordance with 616.11 on the foundation prior to basket placement. Baskets shall be founded on the geotextile lined bed and laid to the lines and dimensions specified.

Gabion and revet mattress baskets shall be placed as shown on the plans. Baskets shall be assembled, connected and filled in accordance with the manufacturer's recommendations and these specifications.

Riprap shall be placed in close contact in the baskets so that maximum fill is obtained. Vertically exposed faces of the baskets shall be hand filled with larger

aggregate. Aggregate shall be placed in 12 in. (300 mm) lifts so as to minimize basket distortion and damage to basket coating. Fill height differential between adjacent baskets shall not exceed 12 in. (300 mm) during construction. Twisted wire baskets shall be overfilled by 1 in. (25 mm) to 2 in. (50 mm) to allow for settlement. Welded wire baskets do not require overfilling. The baskets may be machine filled with sufficient handwork as required to accomplish the requirements herein.

625.05 Method of Measurement

Gabion and revet mattress baskets will be measured by the cubic yard (cubic meter) of riprap required to fill the baskets in place. Geotextiles will be measured in accordance with 616.12.

625.06 Basis of Payment

Gabion and revet mattress baskets will be paid for at the contract unit price per cubic yard (cubic meter). Geotextiles will be paid in accordance with 616.13. Excavation of rock that is not identified within the limits of the foundation ~~and is encountered within the limits of the foundation~~ will be paid for in accordance with 104.03.

Payment will be made under:

Pay Item	Pay Unit Symbol
Gabions, Metallic Coated	CYS (m3)
Gabions, PVC Coated	CYS (m3)
Geotextiles.....	SYS (m2)
Revet Mattress, Metallic Coated.....	CYS (m3)
Revet Mattress, PVC Coated.....	CYS (m3)

The cost of furnishing the wire mesh baskets, spiral binders, lacing wire, stiffeners, tie and connecting wire, selvages, riprap material for filling the wire mesh baskets, soil anchor stakes for the wire mesh baskets, and all labor, materials and equipment required to furnish and install gabions or revet mattresses shall be included in the cost of the pay item.

The cost of excavation for foundations shall be included in the cost of the gabion or revet mattress pay items.

REVISED RECURRING SPECIAL PROVISION625-R-194 GABIONS AND REVET MATTRESSES (CONTINUED).**COMMITTEE COMMENTS ON THIS ITEM:**

The Committee would like to see how well this specification works in the field before incorporating it in the Standard Specifications.

Other sections containing
specific cross references:

None

General Instructions to Field Employees

Update Required? Yes

By - Addition

Frequency Manual

Update Required? No

Recurring Special Provisions
potentially affected:

See Above

Standard Sheets potentially affected:

None

Motion: Mr. Heustis
Second: Ms. Rearick

Ayes: 9

Nays: 0

Action: Passed as revised

 x RSP Effective: July 2008 Letting

RSP Sunset Date: March 2010

 RPD Effective: Letting

 20__ Standard Specifications Book

 20__ Standards Edition

 20__ Design Manual

 Technical Advisory

Received FHWA Approval? Yes

NEW RECURRING SPECIAL PROVISION

808-R-XXX PERFORMANCE BASED PAINT PAVEMENT MARKINGS

(Adopted 0X-XX-08)

The Standard Specifications are revised as follows:

SECTION 109, AFTER LINE 643, INSERT AS FOLLOWS:

(f) Pavement Traffic Markings, PTM

Quality adjustments will be calculated in accordance with 808.07.

SECTION 808, DELETE LINES 142 THROUGH 172.

SECTION 808, AFTER LINE 172, INSERT AS FOLLOWS:

(a) Traffic Paint***1. Traffic Paint Pavement Markings***

These traffic paint markings shall be used for temporary pavement markings or when performance based markings are not specified.

a. Application

Fast dry traffic paint shall be applied only when the pavement temperature is 40°F (5°C) or above. Waterborne traffic paint shall be applied only when the pavement temperature is 50°F (10°C) or above. Fast dry traffic paint will only be permitted between October 1 and the following April 30. Cold temperature waterborne traffic paint shall be applied only when the pavement and ambient air temperature is a minimum of 35°F (2°C) and rising.

The wet film thickness of the traffic paint shall be a minimum of 15 mils (380 µm). Painted lines and markings shall be immediately reflectorized by applying glass beads at a uniform minimum rate of 6 lb/gal. (0.7 kg/L) of traffic paint.

Painted markings on newly constructed surfaces shall receive two applications of paint and glass beads. The second application shall be applied as soon as practical after the first application dries.

b. Equipment

Traffic paint shall be applied with a spray type machine capable of applying the traffic paint under pressure through a nozzle directly onto the pavement. The machine shall be equipped with the following:

- (1) an air blast device for cleaning the pavement ahead of the application;*
- (2) a guide pointer to keep the machine on an accurate line;*
- (3) spray guns which can be operated individually or simultaneously;*
- (4) agitator(s);*
- (5) a control device to maintain uniform flow and application;*
- (6) capability of heating the material to application temperatures;*

- (7) *an automatic device which will provide a line of the required pattern; and*
- (8) *an automatic glass bead dispenser which is synchronized with the marking application.*

A small hand propelled machine, designed for that purpose, may be used to apply pavement markings. A brush may be used if approved to apply some markings.

2. Performance Based Traffic Paint Pavement Markings

The performance based traffic paint pavement markings consist of furnishing and applying longitudinal markings of waterborne traffic paint and glass beads, to HMA and PCC pavements. The performance based traffic paint markings shall only be applied when conditions meet or exceed the manufacturer's recommendations. These painted markings shall meet or exceed all performance requirements.

a. Materials

The waterborne traffic paint and glass beads shall be commercially available traffic marking materials which shall be chosen by the Contractor and will not be required to meet the material specifications found in 909.05 or 921.02(e). A certification which shows the paint meets all IDEM and EPA regulatory requirements for VOC levels and lead, chromium or other heavy metals from the paint manufacturer shall be provided. The daytime and nighttime color of the applied markings shall be in accordance with ASTM D 6628 when determined in accordance with ASTM E 811 and E 1349. Acceptance of the materials will also be based on the performance of the applied markings.

b. Application Requirements

The paint manufacturer's recommendations shall be followed in regard to all requirements during application and curing of the pavement markings. The pavement markings shall be protected from traffic until dry to eliminate tracking. The application equipment shall be in accordance with 808.07(a)1b.

The application rates utilized of the paint and glass beads is at the discretion of the contractor provided the minimum wet film thickness of the applied paint is 15 mils and the minimum application of glass beads is 6 pound per gallon of paint. The number of applications of paint and beads shall be as necessary to meet the performance requirements.

c. Performance Requirements

(1) Retro-reflectivity

The painted centerlines and/or edgelines shall meet or exceed minimum average retro-reflectivity measurements. The white pavement markings shall provide a minimum average retro-reflectivity of 250 mcd/m²/lx. The yellow pavement markings shall provide a minimum average of 175 mcd/m²/lx.

If a pay item, retro-reflectivity testing is included in the contract and performance based traffic paint is specified, retro-reflectivity testing equipment shall be furnished, calibrated, and operated in accordance with ITM 931. The markings shall be tested in a period of not less than 14 days to not more than 30 days after the materials are applied.

The test results produced shall become the property of the Department. The retro-reflectivity equipment shall remain the property of the Contractor.

When retro-reflectivity testing is not included as a pay item, the Department will furnish, calibrate, and operate the testing equipment in accordance with ITM 931. The markings will be tested in a period of not less than 14 days to not more than 30 days after the materials are applied.

(2) Durability

The pavement markings shall have a minimum resistance to wear of 97% in accordance with ASTM D 913 for a minimum of 90 days after application.

d. Retro-reflectivity Quality Assurance Adjustments

Pavement markings that fail to meet the minimum average retro-reflectivity will have quality adjustments applied to the payment of the markings as follows:

<i>White</i>	<i>Yellow</i>	<i>Quality Adjustment</i>
<i>>250 mcd/m²/lx</i>	<i>>175 mcd/m²/lx</i>	<i>1.00</i>
<i>225 to 249</i>	<i>-</i>	<i>0.95</i>
<i>200 to 224</i>	<i>150 to 174</i>	<i>0.90</i>
<i>175 to 199</i>	<i>-</i>	<i>0.85</i>
<i>150 to 174</i>	<i>125 to 149</i>	<i>0.80</i>
<i>125 to 149</i>	<i>-</i>	<i>0.75</i>
<i>100 to 124</i>	<i>100 to 124</i>	<i>0.70</i>

Pavement marking segments which are found to have an average retro-reflectivity reading of below 100mcd/m²/lx shall be re-striped with no additional payment. The re-striping shall begin within 14 calendar days of the completion of the retro-reflectivity measurement. Line segments of white pavement markings which have retro-reflectivity measurements between 100 and 249mcd/m²/lx may be re-striped with no additional payment. Line segments of yellow pavement markings which have retro-reflectivity measurements between 100 and 175mcd/m²/lx may be re-striped with no additional payment. Following each re-striping, additional retro-reflectivity measurements will be made at no additional payment. Quality assurance adjustments will be based on the final retro-reflectivity measurements. The alignment of all re-striped pavement markings shall be placed within ±0.25 inches in width and ±2.0 inches in length of the original placed markings. No more than two re-stripings will be permitted. If the final average retro-reflectivity measurements is below 100 mcd/m²/lx or the alignment or color tolerances are not in compliance the segment of line will be adjudicated as failed material in accordance with 105.03.

SECTION 808, AFTER LINE 480, INSERT AS FOLLOWS:

Retro-reflectivity testing will not be measured.

NEW RECURRING SPECIAL PROVISION

808-R-XXX PERFORMANCE BASED PAINT PAVEMENT MARKINGS (CONTINUED).

SECTION 808, AFTER LINE 521, INSERT AS FOLLOWS:

Payment for furnishing, calibrating, and operating retro-reflectivity testing equipment will be paid for at the contract lump sum price if the Schedule of Pay Items includes a lump sum pay item for retro-reflectivity testing. Adjustments to the contract payment with respect to retro-reflectivity of performance based pavement markings will be included in a quality assurance adjustment pay item in accordance with 109.05.1. If the retro-reflectivity testing cannot be performed per ITM 931 due to weather limitations only, the testing requirement may be waived and payment made at 100% provided that all other requirements are met and no payment will be made for retro-reflectivity testing.

SECTION 808, AFTER LINE 532, INSERT AS FOLLOWS:

Line, Performance Based, _____, _____, _____, _____ in. (mm) LFT (m)
material type color width

SECTION 808, AFTER LINE 537, INSERT AS FOLLOWS:

Retro-reflectivity Testing LS

SECTION 909, AFTER LINE 498, INSERT AS FOLLOWS:

(d) Cold Temperature White and Yellow Waterborne Traffic Paint

The cold temperature white and yellow waterborne traffic paint shall consist of an emulsion of pigmented binder formulated to be applied and cure at air and pavement temperatures above 35°F (2°C). The cold temperature waterborne traffic paints shall be in accordance with 909.05(c) except for the application temperature and no-tracking condition requirements.

NEW RECURRING SPECIAL PROVISION808-R-XXX PERFORMANCE BASED PAINT PAVEMENT MARKINGS (CONTINUED).COMMITTEE COMMENTS ON THIS ITEM:

To be set up as a Recurring Special Provision for two construction seasons. The 808 Committee (with district input) will evaluate effectiveness of RSP.

Not all districts have equipment for testing.

Mr. Heustis will revise testing paragraphs for clarification.

Other sections containing
specific cross references:

109, 808, 909

General Instructions to Field Employees

Update Required? Yes

By - Addition

Frequency Manual

Update Required? No

Recurring Special Provisions
potentially affected:

See Above

Standard Sheets potentially affected:

808-MKPM 01 thru 06

Motion: Mr. Heustis

Second: Mr. Walker

Ayes: 9

Nays: 0

Action: Passed as revised

x RSP Effective: July 2008 Letting

RSP Sunset Date: October 1, 2010

___ RPD Effective: Letting

___ 20__ Standard Specifications Book

___ 20__ Standards Edition

___ 20__ Design Manual

___ Technical Advisory

Received FHWA Approval? Yes

REVISION TO DESIGN MANUALCREATE A SECTION IN THE DESIGN MANUAL FOR BICYCLE FACILITIES (SHARED USE PATHS)

This guide regarding the design of bicycle facilities is to provide information on the development of shared-use path facilities to enhance and encourage safe bicycle travel. The purpose of this guide is to provide engineers, planners and designers with a primary source of guidance to implement the INDOT Design Manual Section for the design of bicycle facilities in conjunction with other Chapters of the IDM, the Indiana Manual on Uniform Traffic Control Devices (IN MUTCD), the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities (1999). This guide is not intended to set forth strict standards, but rather to present sound guidelines that will be valuable in attaining good design, sensitive to the needs of both bicyclists and other users.

COMMITTEE COMMENTS ON THIS ITEM:

Presented for Committee's approval of concept.

Mr. Wright distributed copies of draft Chapter 51 of Indiana Design Manual entitled "Bicycle Facilities". This section covers shared-use paths.

Mr. Andrews stated that he was developing a pavement design with "generic" subgrade treatment.

Other sections containing
specific cross references:

None

General Instructions to Field Employees
Update Required? No

Frequency Manual
Update Required? No

Recurring Special Provisions
potentially affected:

None

Standard Sheets potentially affected:

None

Motion: Mr. Wright

Second: Mr. Cales

Ayes: 9

Nays: 0

Action: Passed as submitted

___ RSP Effective: _____ Letting

RSP Sunset Date: _____

___ RPD Effective: _____ Letting

___ 20__ Standard Specifications Book

___ 20__ Standards Edition

___ 20__ Design Manual

x Technical Advisory

Received FHWA Approval? Yes